

Screw Cooling Length

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Years ago, many screws were manufactured with a cooling channel drilled all the way from the shank end to the metering section, close to the tip of the screw. Today, it is more common to have a screw where the cooling hole is only in approximately the first 5 feed flights.

If it is necessary to shorten the screw cooling hole length, one can insert a wooden plug. Oak is a good material to use. Determine the hole size and length of the plug required and prepare the plug. It is better to do the modification on a cold screw. Remove the rotary union and cooling tube. Inspect the existing hole to verify its length and clean the hole with a reamer or wire brush to remove scale that has built up. Flush out the cooling hole. Prepare a long threaded rod and attach a short test plug section to verify that one can fit the plug at the end of the current screw cooling hole. Inset plug, and verify the new hole length. Cut off the cooling tube, leaving clearance for expansion of the plug. As the plug could shift backward, covering the exit of the cooling tube, one needs to drill radial holes in the cooling tube to allow water to flow properly.

- John Wagner, JWV Enterprises

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